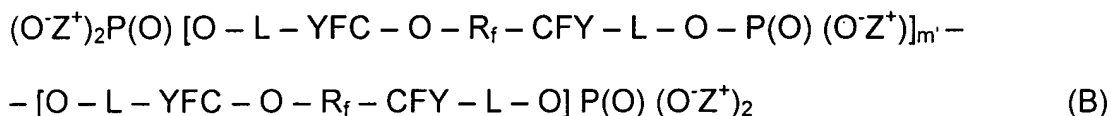


AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for conferring anticalcar properties to Use in
~~the treatment of~~ metal substrata and their alloys; comprising the application of mono-
and bifunctional (per)fluoropolyether compounds having the following structures:



wherein:

m' is an integer from 0 to 20, ~~preferably from 0 to 4~~;

L is an organic group selected from $-CH_2 - (OCH_2CH_2)_n -$, $-CO - NR' - (CH_2)_q -$,

with $R' = H$ or $C_1 - C_4$ alkyl;

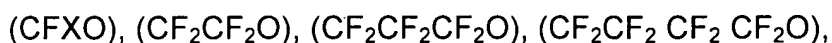
$n = 0 - 8$, ~~preferably 1 - 3~~; $q = 1 - 8$, ~~preferably 1 - 3~~;

$Z = H$, alkaline metal or NR_4 group with $R = H$ or $C_1 - C_4$ alkyl; $Y = F, CF_3$;

$m = 1, 2, 3$, ~~preferably 1, 2~~;

W is a group $-Si(R_1)_\alpha (OR_2)_{3-\alpha}$ with $\alpha = 0, 1, 2$, R_1 and R_2 equal to or different from each other are $C_1 - C_6$ alkyl groups optionally containing one or more ether O , $C_6 - C_{10}$ aryl groups, $C_7 - C_{12}$ alkyl - aryl or aryl - alkyl groups;

R_f has a number average molecular weight in the range 350 - 8,000, ~~preferably 500 - 3,000~~ and comprises repeating units having at least one of the following structures, statistically placed along the chain:



$(\text{CR}_4\text{R}_5\text{CF}_2\text{CF}_2\text{O}), (\text{CF}(\text{CF}_3)\text{CF}_2\text{O}), (\text{CF}_2\text{CF}(\text{CF}_3)\text{O}),$

wherein

$\text{X} = \text{F}, \text{CF}_3;$

R_4 and R_5 , equal to or different from each other, are selected from H, Cl, or perfluoroalkyl having from 1 to 4 carbon atoms.

2. (Currently Amended) The method of ~~Use in the treatment of metal substrata according to claim 1,~~ wherein Rf is selected from the following structures:

1) $-(\text{CF}_2\text{O})_{a'} - (\text{CF}_2\text{CF}_2\text{O})_{b'} -$

with a'/b' in the range 0.5 – 2, extremes included, a' and b' being integers

such as to give the above molecular weight;

2) $-(\text{C}_3\text{F}_6\text{O})_r - \text{C}_2\text{F}_4\text{O})_b - (\text{CFXO})_t -$

with $r/b = 0.5 - 2.0$; $(r+b)/t$ is comprised between 10 – 30, b , r and t being integers such as to give the above molecular weight, X has the above meaning;

3) $-(\text{C}_3\text{F}_6\text{O})_{r'} - (\text{CFXO})_{t'} -$

t' can be 0;

when t' is different from 0 then $r'/t' = 10 - 30$, r' and t' being integers such as to give the above molecular weight; X has the above meaning;

4) $-(\text{OCF}_2\text{CF}(\text{CF}_3))_z - \text{OCF}_2(\text{R}'\text{f})_y - \text{CF}_2\text{O} - (\text{CF}(\text{CF}_3)\text{CF}_2\text{O})_z -$

wherein z is an integer such that the molecular weight is the above one;

y is an integer between 0 and 1 and $\text{R}'\text{f}$ is a fluoroalkylene group ~~having for example 1-4 carbon atoms;~~

5) $-(\text{OCF}_2\text{CF}_2\text{CR}_4\text{R}_5)_q - \text{OCF}_2(\text{R}'\text{f})_y - \text{CF}_2\text{O} - (\text{CR}_4\text{R}_5\text{CF}_2\text{CF}_2\text{O})_s -$

wherein:

q and s are integers such that the molecular weight is the above one;

R₄, R₅, R'_f, y have the above meaning;

6) $-(C_3F_6O)_r \cdots (CFXO)_t \cdots OC F_2(R'f)_y -$

$CF_2O(CF(CF_3)CF_2O)_r \cdots (CFXO)_t \cdots -$

wherein $r + t = 10 - 30$,

r and t being integers such as to give the above molecular weight;

R'_f and y having the above meaning.

3. (Currently Amended) The method of Use in the treatment of metal substrata according to claim 1, wherein in the compounds of structure (A) and (C) the end group of R_f is of the T-O- type, wherein T is a (per) fluoroalkyl group selected from: -CF₃, -C₂F₅, -C₃F₇, -CF₂Cl, -C₂F₄Cl, -C₃F₆Cl; optionally one or two F atoms, preferably one, can be substituted by H.

4. (Currently Amended) The method of Use in the treatment of metal substrata according to claim 1, wherein a mixture of compounds (C) and (D) is used.

5. (Currently Amended) The method of Use in the treatment of metal substrata according to claim 1, wherein the treatment is made by dipping, spin-coating, spraying, padding or brushing.

6. (Currently Amended) The method of Use in the treatment of metal substrata according to claim 1, wherein the perfluoropolyether compounds of structure (C) and (D) are applied using formulations with solvent, solvent-water mixtures or prevailingly aqueous formulations.

7. (Currently Amended) The method of Use in the treatment of metal substrata according to claim 6, wherein the concentration of the perfluoropolyether compounds of structure (C) and (D) in the formulation is in the range 0.01 – 15% by weight, preferably 0.1 – 5% by weight.

8. (Currently Amended) The method of Use in the treatment of metal substrata according to claim 1, wherein the perfluoropolyether compounds of structure (A) and (B) are applied using aqueous formulations or formulations having a polar solvent.

9. (Currently Amended) The method of Use in the treatment of metal substrata according to claim 8, wherein the formulation contains an amount by weight of perfluoropolyether compound of structure (A) and (B) in the range 0.1 – 10% by weight, preferably 0.5 – 5%.

10. (Currently Amended) A method of conferring anti-corrosive properties to ~~Use in the treatment of metal substrata and their alloys to confer anti-corrosive~~ properties comprising application of the mono- and bi-functional (per)fluoropolyether compounds of claim 1.

11. (Currently Amended) The method of Use according to claim 10, wherein the perfluoropolyether compounds have structure (C) and (D).

12. (New) The method of claim 1 wherein m' is an integer from 0 to 4.

13. (New) The method of claim 1 wherein $n = 1 - 3$.

14. (New) The method of claim 1 wherein $q = 1 - 3$.

15. (New) The method of claim 1 wherein $m = 1$ or 2.

16. (New) The method of claim 1 wherein R_f has a number average molecular weight in the range 500 – 3,000.

17. (New) The method of claim 2 wherein R'_f is a fluoroalkylene group having 1 – 4 carbon atoms.

18. (New) The method of claim 3, wherein in T, one F atom is substituted by H.

19. (New) The method of claim 7, wherein the concentration of the perfluoropoly ether compounds of structure (C) and (D) in the formulation is in the range 0.1 - 5% by weight.

20. (New) The method of claim 9, wherein the amount by weight or weight of perfluoropolymer compound of structure (A) and (B) is in the range 0.5 – 5%.